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jc564 U.S. PTO

Attorney's Docket No. UC98-075-2

A

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Box Patent Application
Assistant Commissioner for Patents
Washington, D.C. 20231

jc530 U.S. PTO
09/262172
03/03/99

NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of Inventor(s):

STEVEN D. MCGLOUGHLIN

For (title):

METHOD AND APPARATUS FOR ACCESSING AND DISPLAYING
MULTIMEDIA CONTENT

1. Type of Application

This new application is for a(n):

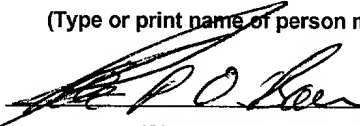
- ☒ Original (nonprovisional)
- ☐ Design
- ☐ Plant
- ☐ Divisional
- ☐ Continuation
- ☐ Continuation-in-part (CIP)

CERTIFICATION UNDER 37 CFR 1.10

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date MARCH 3, 1999 in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EL032642482US addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

John P. O'Banion

(Type or print name of person mailing paper)



(Signature of person mailing paper)

NOTE: Each paper or fee referred to as enclosed herein has the number of the "Express Mail" label placed thereon prior to mailing. 37 CFR 1.10(b).

2. Papers Enclosed Which Are Required For Filing Date Under 37 CFR 1.53(b) (Regular) or 37 CFR 1.153 (Design) Application

10 Pages of specification

3 Pages of claims

1 Pages of Abstract

12 Sheets of drawing

X formal

— informal

— The enclosed drawing(s) include photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. 1.84(b).

3. Additional papers enclosed

— Preliminary Amendment

— Information Disclosure Statement

X Form PTO - 1449

X Citations

— Authorization of Attorney(s) to Accept and Follow Instructions from Representative

— Special Comments

X MICROFICHE APPENDIX

4. Declaration Or Oath

— Enclosed

executed by:

— inventor(s)

— legal representative of inventor(s). 37 CFR 1.42 or 1.43.

— joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.

— this is the petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 is also attached. (See item 18 below for fee.)

☐ Copy from a prior application (37 CFR 1.63(d)) (divisional or continuation only)

☒ Not Enclosed.

☒ Application is made by a person authorized under 37 CFR 1.41(c) on behalf of all of the above named inventor(s). (The declaration or oath, along with the surcharge required by 37 CFR 1.16(e) can be filed subsequently).

☐ Attached is a showing that the filing is authorized. (Not required unless called into question. 37 CFR 1.41(d)).

5. Inventorship Statement

The inventorship for all the claims in this application are:

☒ The same

or

☐ Are not the same. An explanation, including the ownership of the various claims at the time the last claimed invention was made,

☐ is submitted.

☐ will be submitted.

6. Language

☒ English

☐ non-English

☐ the attached translation is a verified translation. 37 CFR 1.52(d).

7. Assignment

☒ An assignment of the invention to: THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

☐ is attached. A separate "ASSIGNMENT COVER LETTER ACCOMPANYING NEW PATENT APPLICATION" is also attached.

☒ will follow.

8. Benefit of Prior U.S. Application(s) (35 U.S.C. 119(e), 120 or 121)

NOTE: "In order for an application to claim the benefit of a prior filed copending national application, the prior application must name as an inventor at least one inventor named in the later filed application and disclose the named inventor's invention claimed in at least one claim of the later filed application in the manner provided by the first paragraph of 35 U.S.C. 112." 37 CFR 1.78(a).

NOTE: "In addition, the prior application must be (1) complete as set forth in § 1.51, or (2) entitled to a filing date as set forth in § 1.53(b) and include the basic filing fee set forth in § 1.16, or (3) entitled to a filing date as set forth in § 1.53(b) and have paid therein the processing and retention fee set forth in § 1.21(l) within the time set forth in § 1.53(d)." 37 CFR 1.78(a).

NOTE: "Any nonprovisional application claiming the benefit of one or more prior filed copending provisional applications must contain or be amended to contain in the first sentence of the specification following the title a reference to each such prior provisional application, identifying it as a provisional application, and including the provisional application number (consisting of the series code and serial number) and filing date." 37 CFR 1.78(a)(4).

NOTE: "Any nonprovisional application claiming the benefit of one or more prior filed copending nonprovisional applications or international applications designating the United States of America must contain or be amended to contain in the first sentence of the specification following the title a reference to each such prior application, identifying it by application number (consisting of the series code and serial number) and filing date or international application number and international filing date and indicating the relationship of the applications. Cross-references to other related applications may be made where appropriate. (See § 1.14(b))." 37 CFR 1.78(2).

X **Applicant(s) hereby claim(s) the benefit of the filing date of prior U.S. Provisional Application Serial No. 60/076,771 filed on MARCH 4, 1998.**

(a) **Application History (title as originally filed and as last amended, serial number, and filing date of all prior applications):**

Title: METHOD AND APPARATUS FOR ACCESSING AND DISPLAYING MULTIMEDIA CONTENT
Ser. No.: 60/076,771
Filed: MARCH 4, 1998

(b) **Name of applicant(s) (as originally filed and as last amended), and current correspondence address of applicant(s):**

Name: STEPHEN D. MCGLOUGHLIN
Address: 5090 ADALIS DRIVE
ELK GROVE, CA 95758

NOTE: The proper reference to a prior filed PCT application which entered the U.S. national phase is the U.S. serial number and the filing date of the PCT application which designated the U.S.

NOTE: (1) Where the application being transmitted adds subject matter to the International Application then the filing can be as a continuation-in-part or (2) it is desired to do so for other reasons, then the filing can be as a continuation.

NOTE: The deadline for entering the national phase in the U.S. for an international application was clarified in the Notice of April 28, 1987 (1079 O.G. 32 to 46) as follows:

"The Patent and Trademark Office considers the international application to be pending until the 22nd month from the priority date if the United States has been designated and no Demand for International Preliminary Examination has been filed prior to the expiration of the 19th month from the priority date and until the 32nd month from the priority date if a Demand for International Preliminary Examination which elected the United States of America has been filed prior to the expiration of the 19th month from the priority date, provided that a copy of the international application has been communicated to the Patent and Trademark Office within the 20 or 30 month period respectively. If a copy of the international application has not been communicated to the Patent and Trademark Office within the 20 or 30 month period, respectively, the international application becomes abandoned as to the United States 20 or 30 months from the priority date, respectively. These periods have been placed in the rules as paragraph (h) of § 1.494 and paragraph (i) of § 1.495. A continuing application under 35 U.S.C. 365(c) and 120 may be filed anytime during the pendency of the international application."

9. Priority Claim for Prior Application (35 U.S.C. 119)

_____ The prior U.S. application(s), including any prior International Application designating the U.S. identified above in item 8, in turn itself claim(s) foreign priority (ies) as follows:

_____	_____	_____
(country)	(appln. no.)	(filed on)
_____	_____	_____
(country)	(appln. no.)	(filed on)
_____	_____	_____
(country)	(appln. no.)	(filed on)

The certified copy (ies)

- _____ is (are) attached.
- _____ has (have) been filed on _____ in prior application serial number _____ which was filed on _____.
- _____ will follow.

WARNING: The certified copy of the priority application which may have been communicated to the PTO by the International Bureau may not be relied on without the need to file a certified copy of the priority application in a continuing application. This is so because the certified copy of the priority application communicated by the International Bureau is placed in a folder and is not assigned a U.S. serial number unless the national stage is entered. Such folders are disposed of if the national stage is not entered. Therefore, such certified copies may not be available if needed later in the prosecution of a continuing application. An alternative would be to physically remove the priority documents from the folders and transfer them to the continuing application. The resources required to request transfer, retrieve the folders, make suitable record notations, transfer the certified copies, enter and make a record of such copies in the continuing application are substantial. Accordingly, the priority documents in folders of international applications which have not entered the national stage may not be relied on. Notice of April 28, 1987 (1079 O.G. 32 to 46).

10. Further Inventorship Statement Where Benefit of Prior Application(s) Claimed

NOTE: "If the continuation, continuation-in-part, or divisional application is filed by less than all the inventors named in the prior application, a statement must accompany the application when filed requesting deletion of the names of the person or persons who are not inventors of the invention being claimed in the continuation, continuation-in-part, or divisional application." 37 CFR 1.62(a) [emphasis added] (dealing with the file wrapper continuation situation).

NOTE: "In the case of a continuation-in-part application which adds and claims additional disclosure by amendment, an oath or declaration as required by § 1.63 must be filed. In those situations where a new oath or declaration is required due to additional subject matter being claimed, additional inventors may be named in the continuing application. In a continuation or divisional application which discloses and claims only subject matter disclosed in a prior application, no additional oath or declaration is required and the application must name as inventors the same or less than all the inventors in the prior application." 37 CFR 1.60(c). (dealing with the continuation situation).

(complete applicable item (a) or (b) below)

- (a) _____ This application discloses and claims only subject matter disclosed in the prior application whose particulars are set out above and the inventor(s) in this application are

_____ the same

_____ less than those named in the prior application and it is requested that the following inventor(s) identified above for the prior application be deleted:

Name:

Name:

Name:

- (b) _____ This application discloses and claims additional disclosure and a new declaration or oath is being filed. With respect to the prior application whose particulars are set out above, the inventors in this application are

_____ the same

_____ add the following inventors

Name:

Name:

Name:

11. Maintenance of Copendency of Prior Application

NOTE: The PTO finds it useful if a copy of the petition filed in the prior application extending the term for response is filed with the papers constituting the filing of the continuation application. Notice of November 5, 1985 (1060 O.G. 27).

_____ Extension of time in prior application

(This item must be completed and the necessary papers filed in the prior application if the period set in the prior application has run)

_____ A petition, fee and response has been filed to extend the term in the prior application until _____.

_____ A copy of the petition for extension of time in the prior application is attached.

(complete this item and file conditional petition in prior application if previous item not applicable)

_____ Conditional Petition For Extension Of Time In Prior Application

_____ A conditional petition for extension of time is being filed in the pending prior application.

12. Abandonment of Prior Application (if applicable)

— Please abandon the prior application at a time while the prior application is pending or when the petition for extension of time or to revive in that application is granted and when this application is granted a filing date so as to make this application copending with said prior application.

NOTE: According to the Notice of May 13, 1983, (103, TMOG 6-7), the filing of a continuation or continuation-in-part application is a proper response with respect to a petition for extension of time or a petition to revive and should include the express abandonment of the prior application conditioned upon the granting of the petition and the granting of a filing date to the continuing application.

NOTE: "A registered attorney or agent acting under the provisions of § 1.34(a), or of record, may also expressly abandon a prior application as of the filing date granted to a continuing application when filing such a continuing application." 37 CFR 1.138.

13. Petition For Suspension Of Prosecution For The Time Necessary To File An Amendment (if applicable)

WARNING: "The claims of a new application may be finally rejected in the first Office Action in those situations where (1) the new application is a continuing application of, or a substitute for, an earlier application, and (2) all the claims of the new application (a) are drawn to the same invention claimed in the earlier application, and (b) would have been properly rejected on the grounds of art of record in the next Office Action if they had been entered in the earlier application." MPEP § 706.07(b).

NOTE: Where it is possible that the claims on file will give rise to a first action final for this continuation application and for some reason an amendment cannot be filed promptly (e.g., experimental data is being gathered) it may be desirable to file a petition for suspension of prosecution for the time necessary.

(check the next item, if applicable)

— There is provided herewith a Petition to Suspend Prosecution For The Time Necessary To File An Amendment (New Application Filed Concurrently)

14. Notification in Parent Application of this Filing (if applicable)

— A notification of the filing of this application is being filed in the parent application from which this application claims priority under 35 U.S.C. 120.

15. Fee Calculation (37 CFR 1.16)

A. ☒ Regular Application

CLAIMS AS FILED						
	Number filed		Number Extra		Rate	Basic Fee \$ 760.00
Total						
Claims 37 CFR 1.16(c)	6 - 20	=	0	X	\$18.00	=
Independent						
Claims (37 CFR 1.16(b))	6 - 3	=	3	X	\$78.00	= 234.00
Multiple dependent claim(s), if any (37 CFR 1.16(d))				+	\$260.00	=

- ☐ Amendment canceling extra claims enclosed.
- ☐ Amendment deleting multiple-dependencies enclosed.
- ☐ Fee for extra claims is not being paid at this time.

Filing Fee Calculation \$ 994.00

B. ☐ Design application

(\$310.00 - 37 CFR 1.16(f))

Filing Fee Calculation \$ _____

C. ☐ Plant application

(\$480.00 - 37 CFR 1.16(g))

Filing Fee Calculation \$ _____

16. Small Entity Statement(s)

☒ Verified Statements(s) that this is a filing by a small entity under 37 CFR 1.9 and 1.27

☐ is(are) attached.

☒ will follow.

☐ Status as a small entity was claimed in prior application serial number _____
filed on _____, from which benefit is being claimed for this
application under 35 U.S.C. 119(e), 120, 121 or 365(c) and which status as a small entity
is still proper and desired. A copy of the verified statement in the prior application is
included.

Filing Fee Calculation (50% of **A**, **B** or **C** above) \$ 497.00

666000 2/12/2000

17. Request for International-Type Search (37 CFR 1.104(d))

☐ Please prepare an international-type search report for this application at the time when national examination on the merits takes place.

18. Fee Payment Being Made At This Time

☒ Not Enclosed

☒ No filing fee is to be paid at this time. (This and the surcharge required by 37 CFR 1.16(e) can/will be paid subsequently.)

☐ Enclosed

☐ basic filing fee \$ _____

☐ recording assignment (\$40.00; 37 CFR 1.21(h)) \$ _____

☐ petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached. (\$130.00; 37 CFR 1.47 and 1.17(h)) \$ _____

☐ for processing an application with a specification in a non-English language. (\$130.00; 37 CFR 1.52(d) and 1.17(k)) \$ _____

☐ processing and retention fee (\$130.00; 37 CFR 1.53(d) and 1.21(l)) \$ _____

☐ fee for international-type search report. (\$40.00; 37 CFR 1.21(e)) \$ _____

Total Fees Enclosed \$ 497.00

19. Method of Payment of Fees

☐ Check in the amount of \$ _____

☐ Charge Account No. _____ in the amount of \$ _____.
A duplicate of this transmittal is attached.

20. Authorization to Charge Additional Fees

☐ The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No. _____;

☐ 37 CFR 1.16(a), (f) or (g) (filing fees)

☐ 37 CFR 1.16(b), (c) and (d) (presentation of extra claims)

- ☐ 37 CFR 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
- ☐ 37 CFR 1.18 (application processing fees)
- ☐ 37 CFR 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 CFR 1.311(b))

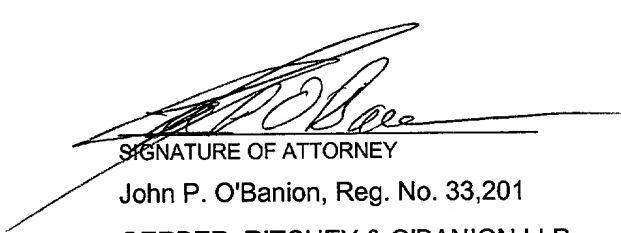
21. Instructions As To Overpayment

- ☐ credit Account No. _____
- ☒ refund

22. Incorporation By Reference of Papers Identified Herein

Applicant(s) hereby incorporate(s) by reference all papers which are identified in this New Application Transmittal.

Dated: March 3, 1999


SIGNATURE OF ATTORNEY

John P. O'Banion, Reg. No. 33,201

GERBER, RITCHEY & O'BANION LLP
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Sacramento, CA 95814
Telephone: (916) 498-1010

TITLE OF THE INVENTION

METHOD AND APPARATUS FOR ACCESSING AND DISPLAYING

MULTIMEDIA CONTENT

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority from U.S. provisional application serial number 60/076,771 filed on March 4, 1998.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH

OR DEVELOPMENT

Not Applicable

REFERENCE TO A MICROFICHE APPENDIX

A microfiche appendix is attached. The total number of microfiche is one (1) and the total number of frames is twenty-four (24).

NOTICE OF MATERIAL SUBJECT TO COPYRIGHT PROTECTION

All of the material in this patent document is subject to copyright protection under the copyright laws of the United States and of other countries. The owner of the copyright rights has no objection to the facsimile reproduction by anyone of the patent document or the patent disclosure, as it appears in the United States Patent and Trademark Office file or records, but otherwise reserves all copyright rights whatsoever.

BACKGROUND OF THE INVENTION

1. Field of the Invention

The present invention pertains generally to multimedia methods and devices, and more particularly to a multimedia delivery apparatus and method where media content from varied sources is accessed as a single seamless application.

2. Description of the Background Art

Many multimedia presentations rely on the use of computers. The computer may access and display media content from a single source, or from a variety of sources such as multiple mass storage devices and the Internet. Where media content from a variety of sources is displayed, however, the computer typically relies on individual components or programs operating independently to display the media content, and does not provide for any integration of the applications. Therefore, the simultaneous presentation of content elements is not seamless, and is displayed in a nonintegrated fashion. In order to make content from a variety sources appear as though it was from a single multimedia application for more effective presentation, there is a need for a multimedia presentation engine for delivery of multimedia of varied content, wherein high-bandwidth media can be stored on local devices, and current and time-sensitive content can be stored remotely on an Internet server, and wherein the varied content can be pulled together as one seamless multimedia application. The present invention satisfies that need, as well as others, and overcomes the deficiencies found in conventional multimedia presentation systems and methods.

BRIEF SUMMARY OF THE INVENTION

The present invention generally pertains to computer software executed on a computer which functions as a "multimedia delivery engine". By way of example, and not of limitation, the invention implements the following two core processes which are embodied in a computer program executed on a conventional programmed data processor:

(a) the program stores media content for the subject matter to be presented in a database file as well as stores references (also in the database) to the media files located on disk or on the Internet; and

(b) the media content is then accessed by the program reading a content page record. This "reader" part of the program locates and displays all of the other media elements referred to in that record (such as video, audio, animation and images), and displays the HTML content of the record as text in a display window. The displaying process functions as follows:

1. The program receives an instruction to locate and access a particular database record or Web page.

2. In the case of a database record, the program locates that record and then writes the HTML text content of that record to a pre-named temporary cache file which the display window shows to the user. Since the content conforms to HTML specifications, this enables the use of graphics and hyperlinks in the display window. Having read and displayed the program-generated HTML temporary file, the program continues to load the other media elements referenced in the database record. As far

as the user is concerned, the program has just loaded another "page" of the content. By using special HTML tags in the textual content, the program can "translate" custom embedded instructions for hyperlinks. This enables the program to store commands for the "engine" in the HTML document itself. Where a conventional HTML document hyperlink would either address another HTML document, or a file, the custom tags can do this as well as refer to other records in the database, locate and display images located on the application's CD-ROM in another illustration window, load and run media components from the database and/or program CD-ROM and load Web server-based content. This process is seamless and transparent to the user. The net result is that the user views the content of this multimedia application as one integral application, regardless of the data's origin.

3. In the case of an instruction to locate a Web page, as long as there is a "live" TCP/IP link from the user's system to the Internet, the program will load that Web page into the display window just as if it is another page of the multimedia application itself. The program is written so as to be able to "interpret" the embedded instruction in the HTML document, and figure out on the fly where it should be looking for the next media component to display.

Given the above, the content for a proposed multimedia application can be assembled into the database that drives this "engine" and appropriate links made to media content on local hardware or remote servers with ease.

An object of this invention is to provide a multimedia delivery vehicle for varied content.

Another object of the invention is to provide a multimedia delivery vehicle wherein high-bandwidth media can be stored on local devices.

Another object of the invention is to provide a multimedia delivery vehicle wherein current and time-sensitive content can be stored remotely on an Internet server.

Another object of the invention it to provide a multimedia delivery vehicle wherein varied content is accessed and displayed as one seamless multimedia application.

Further objects and advantages of the invention will be brought out in the following portions of the specification, wherein the detailed description is for the purpose of fully disclosing preferred embodiments of the invention without placing limitations thereon.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be more fully understood by reference to the following drawings which are for illustrative purposes only:

FIG. 1A through FIG. 1J is a graphical functional block and system flow diagram showing a method and apparatus for accessing and displaying varied multimedia content in accordance with the present invention.

FIG. 2 is a graphical user interface for integrating the windows shown in FIG. 1A through FIG. 1J.

FIG. 3 is a functional block diagram of a computer system suitable for implementing the present invention.

DETAILED DESCRIPTION OF THE INVENTION

For illustrative purposes the present invention is described with reference to the process generally shown in FIG. 1 and FIG. 2, the hardware configuration generally shown in FIG. 3, and the example of software code contained in the microfiche appendix hereto which is incorporated into and forms a part of this specification. It will be appreciated that the invention may vary as to configuration and details without departing from the basic concepts as disclosed herein.

As can be seen in FIG. 1, the present invention includes an engine 10 which is a computer program stored on a mass storage device such as a hard disk drive 12. An example of code for engine 10 is shown in the microfiche appendix submitted herewith. A content database 14 associated with engine 10 stores a plurality of records 16 containing media content for the subject matter to be presented, as well as stores pointers 18 to the locations of media files located on CD-ROM, hard disk or other form of mass storage device, or on the Internet. The records 16 are stored in the database in the form of HTML script which provides instructions for engine 10 to build and display pages and their content. When a particular HTML record is selected, engine 10 writes that record to a temporary file, or cache 20 which is instantly read by an interface program that displays the HTML in a main display normal width window 22a or the main display expanded width window 22b. Images that are too large to comfortably fit either in the main display normal width window 22a or in the main display expanded width window 22b, can be stored in a database and displayed in a separate illustration

window 24. The HTML record can contain special hyperlinks 26 which load and display those illustrations in illustration window 24.

It will be appreciated that page images are automatically loaded as needed, as are media elements referenced in the record. Also, when engine 10 encounters an Internet URL in the record, it looks for a TCP/IP connection to the Web and locates and displays the requested web page. The multimedia engine 10 of the present invention determines the location of the stored media component to be displayed, fetches the component, and displays it in real time. A CD-ROM or DVD 28 would typically serve as a storage device for high bandwidth multimedia content such as instructor video files 30, demonstration video files 32, sound narration files 34, image files 36, graphic content for pages 38, and the like, that would not be practical to download from an Internet server in real time due to download delays and server bandwidth constraints.

A button display 40 is also provided for accessing media that is referenced in the database 14 and instructor video 42, narration 44 or demonstration 46 buttons would appear on button display 40 only when that media component is referenced in the database. Engine 10 determines component presence and file location, and then presents the component requested when the user clicks the corresponding button. For example, if available, the relevant video clips from the instructor video files 30 would be displayed in a video clip window 48 when requested by the user by clicking button 42. When instructor narration is available to complement the main topic, the appropriate button 44 appears and the relevant audio file from sound narration files 34 is played on a speaker 50 when button 44 is clicked by the user. If present, button 46 would be

clicked by the user and the relevant video clips from the demonstration video files 32 would be displayed in a demonstration window 52 to demonstrate a process being described in related text. Note that demonstration videos would be handled as a different media component than the instructor videos, and the engine of the present invention determines when the relevant component is required and then displays the appropriate video clips.

Referring again to control toolbar 40, a map screen button 54 as well as back 56a and forward 56b navigation buttons are also provided. By clicking on map screen button 54, the user will access a map window 58 which displays the current position in the database index with a highlight. Map window 58 will allow a user to double-click on a topic to display that page in the main display. The list is presented in a hierarchical form, which can be expanded or collapsed to give the user an outlined or detailed view of the content. Navigation buttons 56a, 56b all for sequential navigation in the map window for record to record movement. In addition, map window 58 includes a URL entry window 60 which allows entry of an internet URL to direct the main display to an on line Web page if a TCP/IP connection exists.

Referring also to FIG. 2, a graphical interface 62 is shown which integrates the individual windows described in FIG. 1. While the windows are generated as separate functions/entities in the software, they would not appear as separate windows in the graphical interface 62. Thus, it will be appreciated that the windows can be integrated on one interface as shown in FIG. 2 or as separate floating windows as shown in FIG. 1 without departing from the invention.

Lastly, referring to FIG. 3, a functional block diagram of a computer system 100 suitable for implementing the present invention is shown. Such a computer system 100 typically includes a bus 102 which interconnects major subsystems such as a programmable data processor 104, system memory 106 (typically RAM), an input/output (I/O) adapter 108 to which input devices such as a mouse 110 and keyboard 112 are connected, a display adapter 114 to which a thin film transistor (TFT) or cathode ray tube (CRT) display 116 is connected, a removable media drive 118 for receiving a floppy disk or other removable media 120, a host adapter 122 connected to a fixed disk 124, a DVD or CD-ROM drive 126 for receiving a readable or read/write DVD or CD-ROM 128, or other mass storage device, and a network interface 130 for providing a connection to a local network server through an Ethernet® connection or the like, or to a remote server through a telephone link or through the Internet. Those skilled in the art will appreciate that other devices and subsystems could be included, and that the devices and subsystems shown may be interconnected in different ways than shown in FIG. 3. It will further be appreciated that not all of the devices shown are necessary to practice the present invention, and that the present invention may be implemented on any conventional computer system under processor control. Additionally, it will be understood that the operable software or code for implementing the present invention may be stored in computer readable storage media such as system memory 106, removable media 120, fixed disk 124 or CD-ROM 128.

Accordingly, it will be seen that this invention provides a multimedia delivery

vehicle for varied content, wherein high-bandwidth media can be stored on local devices, current and time-sensitive content can be stored remotely on an Internet server, and varied content can be accessed and displayed as one seamless multimedia application. The content for a proposed multimedia application can be assembled into the database that drives the software engine and appropriate links made to media content on local hardware or remote servers with ease.

Although the description above contains many specificities, these should not be construed as limiting the scope of the invention but as merely providing illustrations of some of the presently preferred embodiments of this invention. Thus the scope of this invention should be determined by the appended claims and their legal equivalents.

565000 2482US

CLAIMS

What is claimed is:

1. An apparatus for accessing and displaying multimedia content,
comprising:

5 (a) database means for storing multimedia content records and references to
media files for a multimedia presentation; and

(b) software engine means, executable on a computer, for seamlessly
accessing a content record in said database means and locating and displaying media
elements referred to in that content record.

10 2. An apparatus for accessing and displaying multimedia content,
comprising:

(a) a database containing multimedia content records and references to
media files for a multimedia presentation; and

15 (b) a software engine, executable on a computer, said software engine
seamlessly accessing a content record in said database and locating and displaying
media elements referred to in that content record.

20 3. An apparatus for accessing and displaying multimedia content,
comprising:

(a) a programmable data processor;

(b) a database containing multimedia content records and references to

media files for a multimedia presentation; and

(c) programming associated with said programmable data processor for carrying out the operations of seamlessly accessing a content record in said database means and locating and displaying media elements referred to in that content record.

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4. A computer program for accessing and displaying multimedia content, comprising a set of instructions stored on a media accessible by a computer and executable on said computer, wherein said computer program performs the steps of seamlessly accessing a content record in a database and locating and displaying media elements referred to in that content record.

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5. A multimedia delivery apparatus, comprising:

(a) a database containing multimedia content records and references to media files for a multimedia presentation, and

(b) a software delivery engine associated with said database and executable on a computer for seamlessly accessing a content record in said database means and locating and displaying, as one seamless multimedia application, media elements referred to in that content record, whether said medial elements are stored on a local storage device or stored remotely on an Internet server.

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6. A method for displaying multimedia content, comprising the steps of:

(a) storing in a database, multimedia content records and references to media

Table 1. Demographic characteristics of the study population	
Age (years)	65.0 ± 1.5
Gender	
Male	50.0%
Female	50.0%
Education (years)	12.0 ± 1.0
Marital status	
Married	60.0%
Single	40.0%
Income (USD/month)	1,200.0 ± 200.0
Health status	
Good	70.0%
Fair	30.0%
Bad	0.0%
Smoking status	
Smoker	20.0%
Non-smoker	80.0%
Alcohol consumption	
Drinker	10.0%
Non-drinker	90.0%
Comorbidities	
Hypertension	30.0%
Diabetes	15.0%
Cholesterol	25.0%
Arthritis	10.0%
Depression	5.0%
Other	15.0%

Table 1. Demographic characteristics of the study population	
Age (years)	65.0 ± 1.5
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Marital status	
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Good	70.0%
Fair	30.0%
Bad	0.0%
Smoking status	
Smoker	20.0%
Non-smoker	80.0%
Alcohol consumption	
Drinker	10.0%
Non-drinker	90.0%
Comorbidities	
Hypertension	30.0%
Diabetes	15.0%
Cholesterol	25.0%
Arthritis	10.0%
Depression	5.0%
Other	15.0%

ABSTRACT OF THE DISCLOSURE

A multimedia delivery engine and associated database for accessing and displaying varied multimedia content, whether stored on local storage devices or stored remotely on an Internet server, as one seamless multimedia application.

SECRET

DRAWING(S)

There is attached twelve (12) sheets of drawings.

66000' 4' 3260

EXECUTED OATH OR DECLARATION

An executed declaration shall follow.

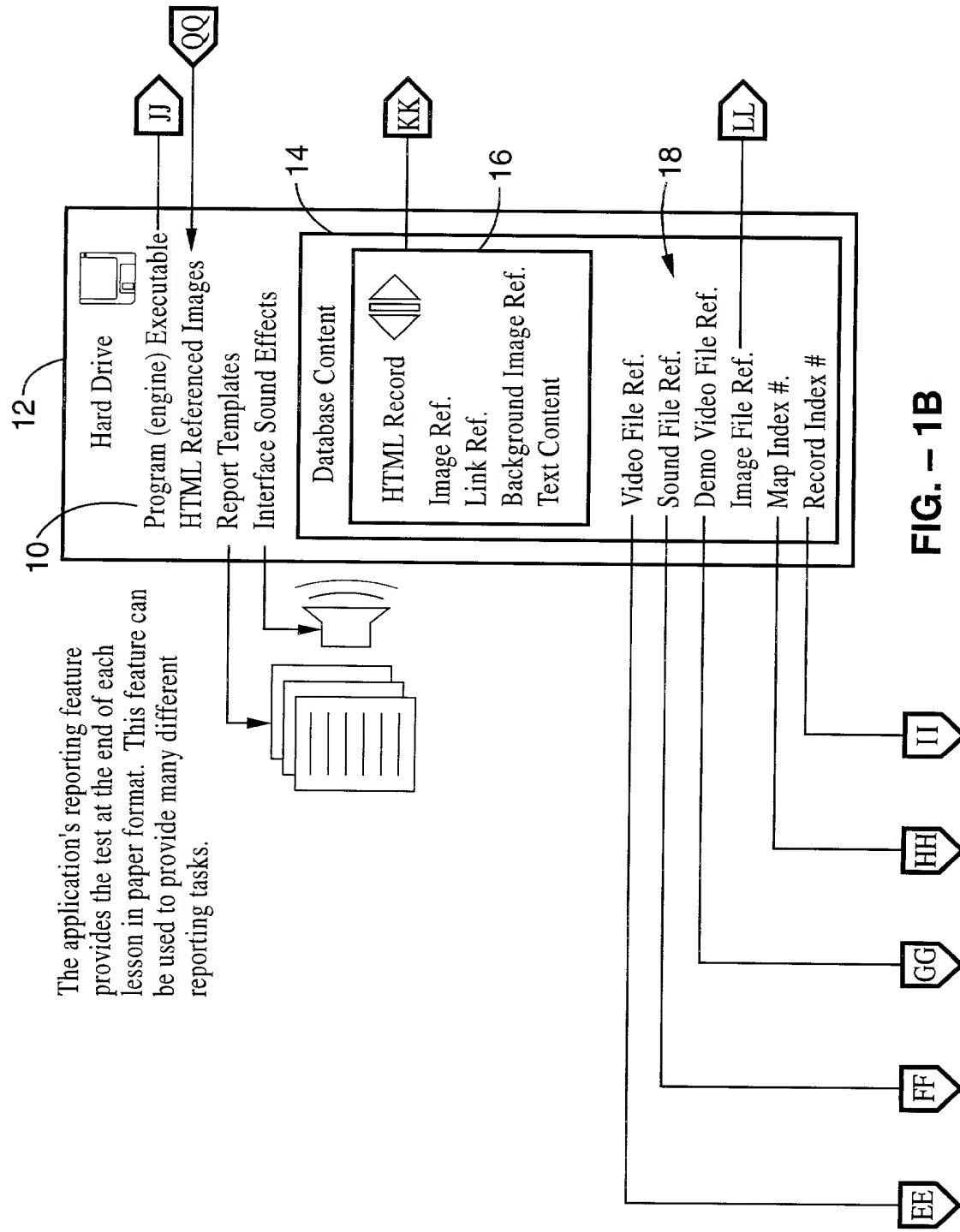
666000-2429999

SEQUENCE LISTING

Not Applicable

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1. Demographic characteristics	
Age	18-24
Gender	Male
Ethnicity	White
Marital status	Married
Education	High school
Income	\$10,000-\$14,999
Health status	Good
Smoking status	Non-smoker
Alcohol consumption	Occasional
Exercise frequency	Regular
Stress level	Low
Sleep quality	Good
Dietary habits	Healthy
Family size	2-3
Work status	Full-time
Religious beliefs	Christian
Political views	Conservative
Travel frequency	Occasional
Pet ownership	Yes
Home ownership	Yes
Vehicle ownership	Yes
Insurance status	Insured
Medical history	No chronic conditions
Current medications	None
Recent hospitalizations	None
Family medical history	No major conditions
Genetic test results	No mutations
Environmental exposures	Low
Occupational hazards	None
Substance use	None
Mental health status	Stable
Social support	Strong
Life satisfaction	High
Overall health score	85



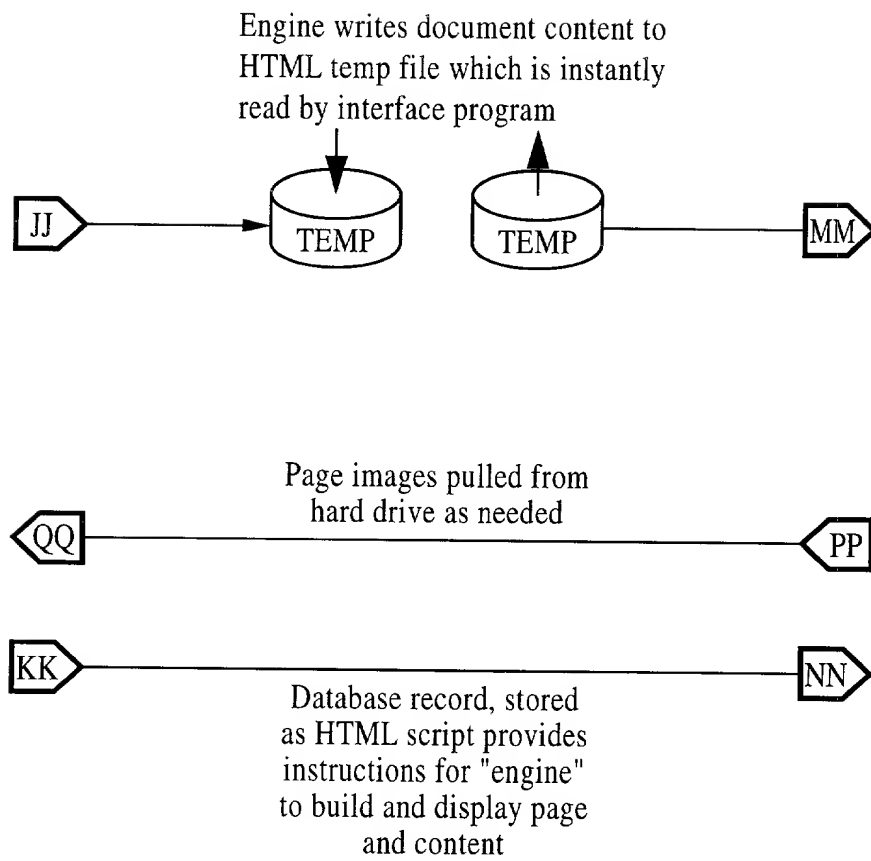
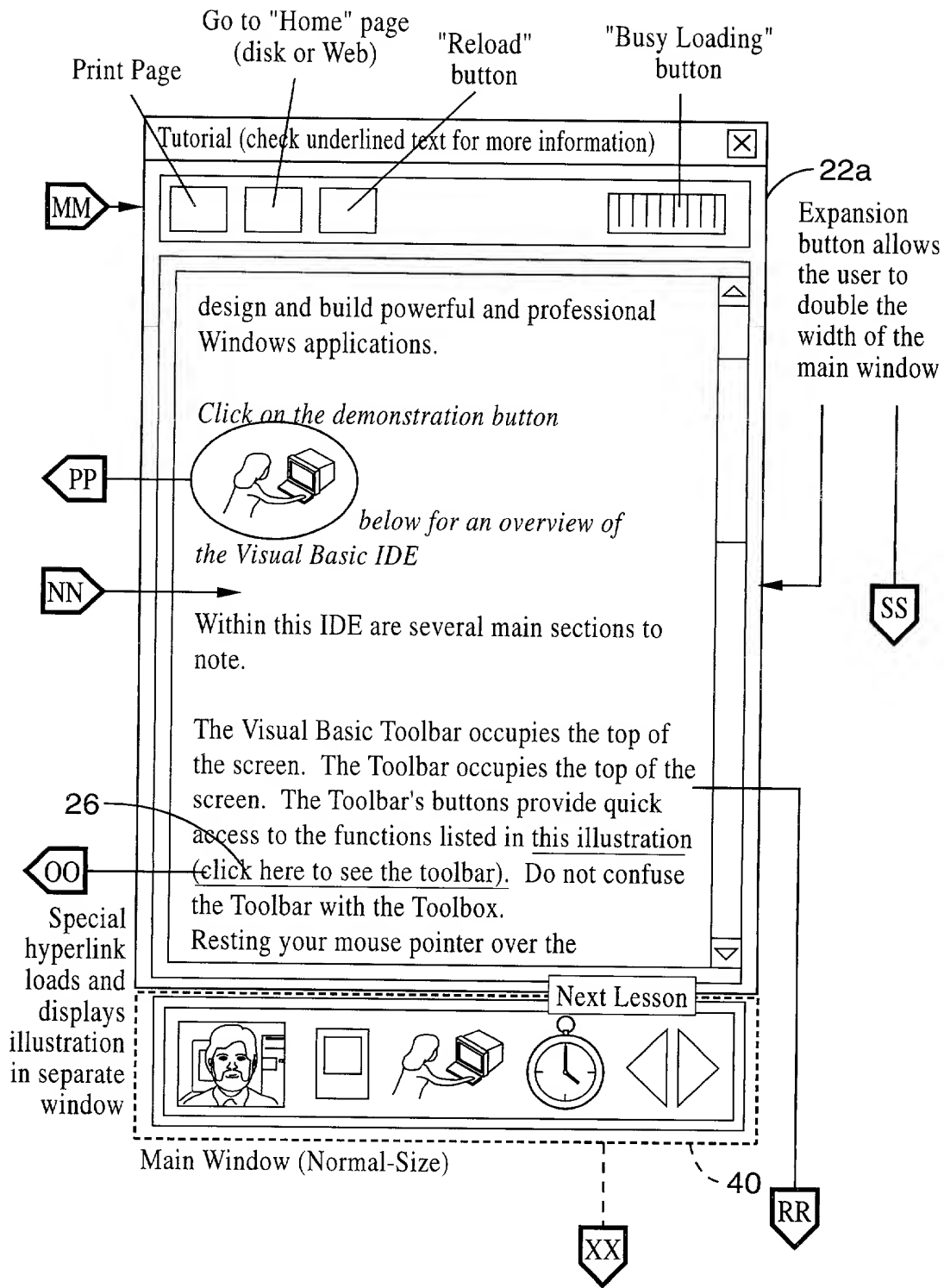


FIG. – 1C



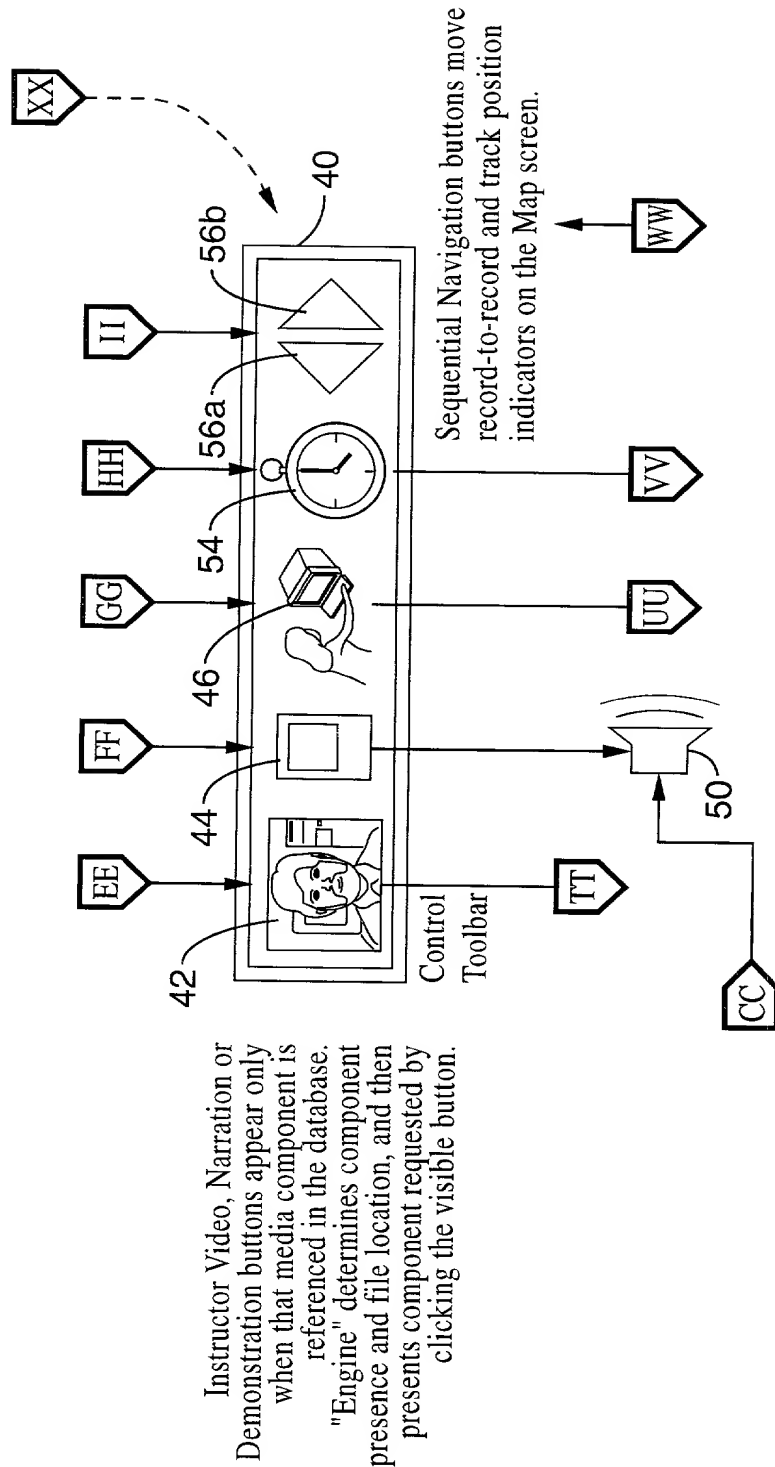


FIG. - 1E

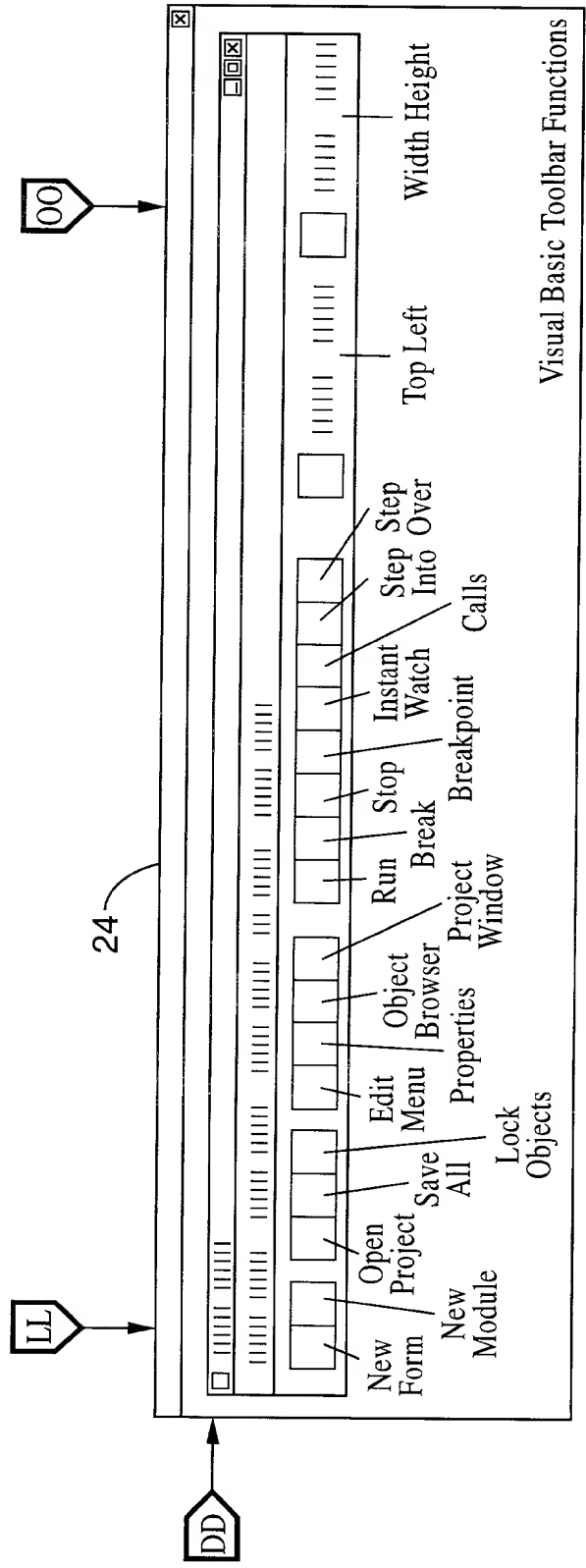


Illustration Window

Images too large to comfortably fit in the main screen at normal width can be stored in the "engines's" database and displayed in this illustration window

FIG. - 1F

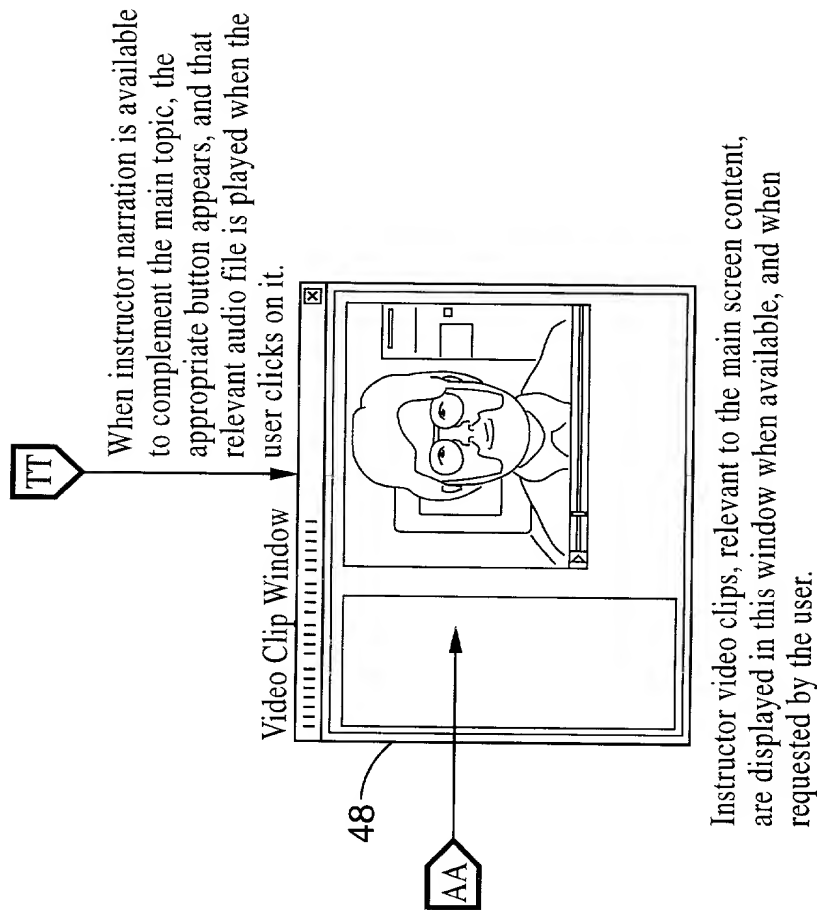


FIG. – 1G

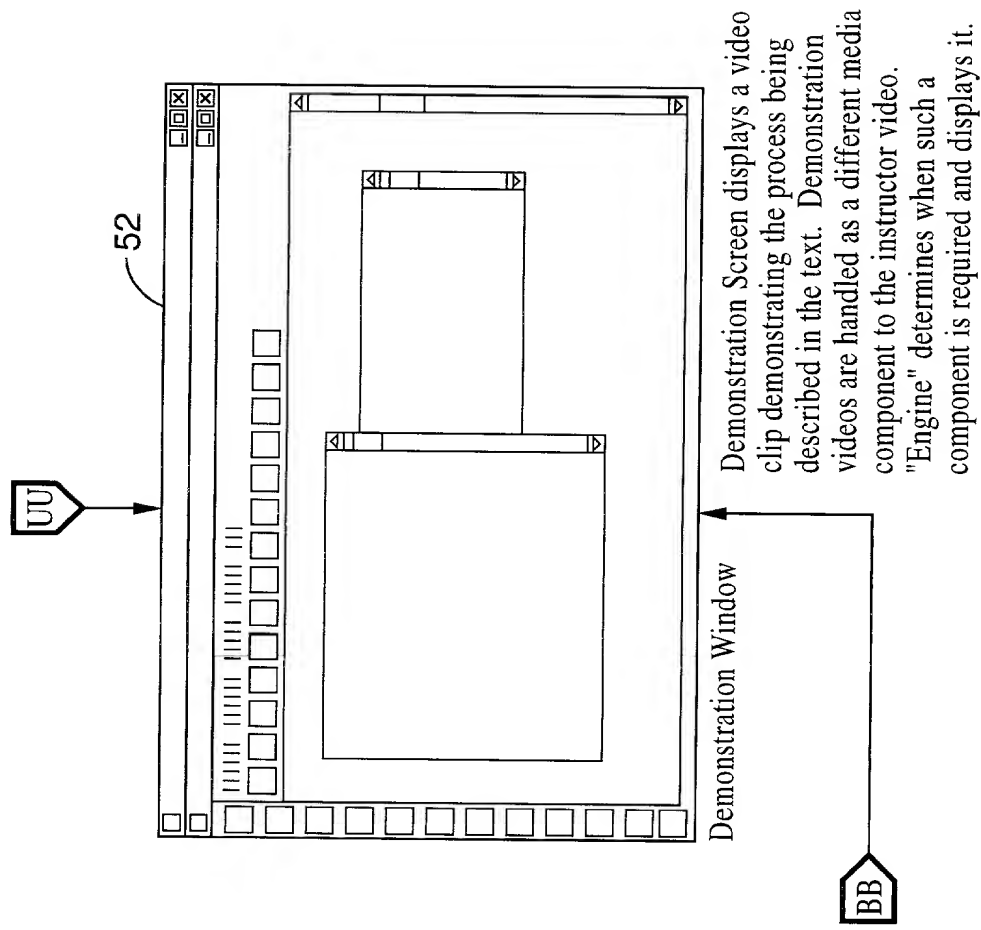


FIG. - 1H

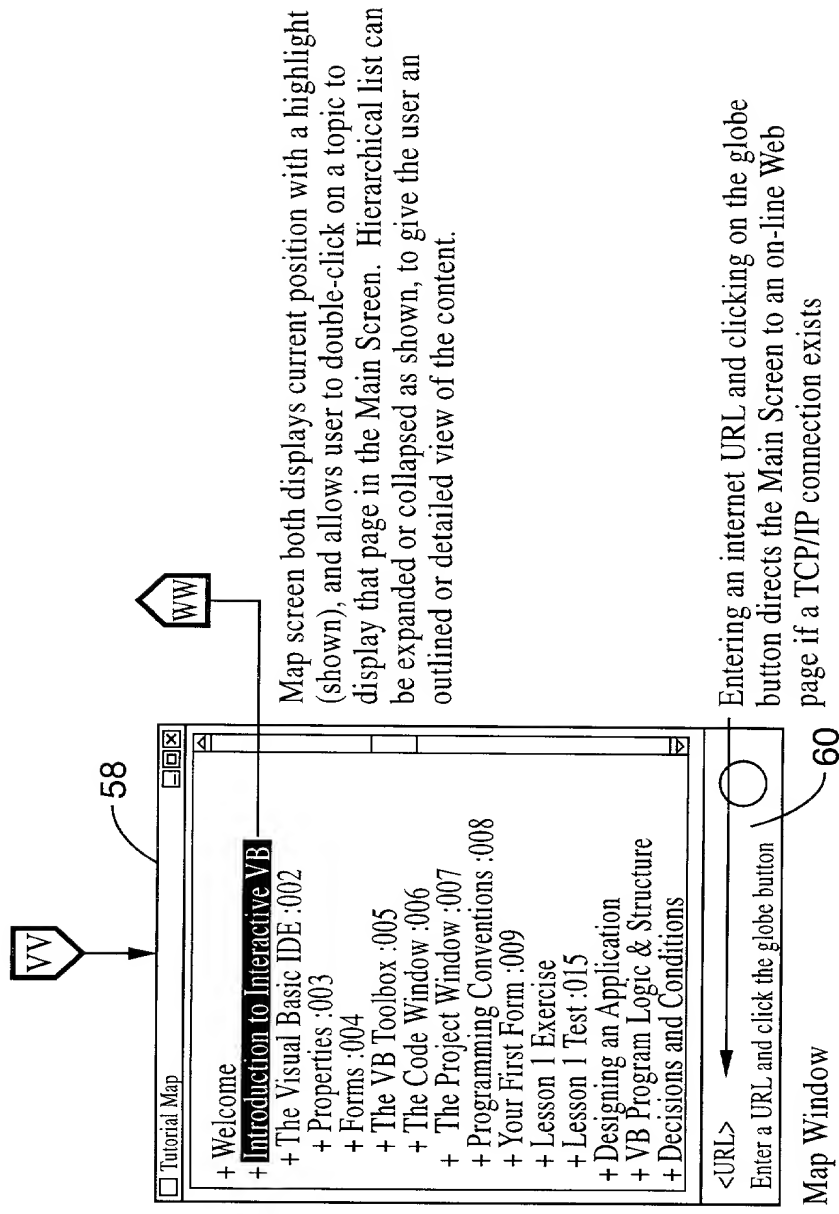
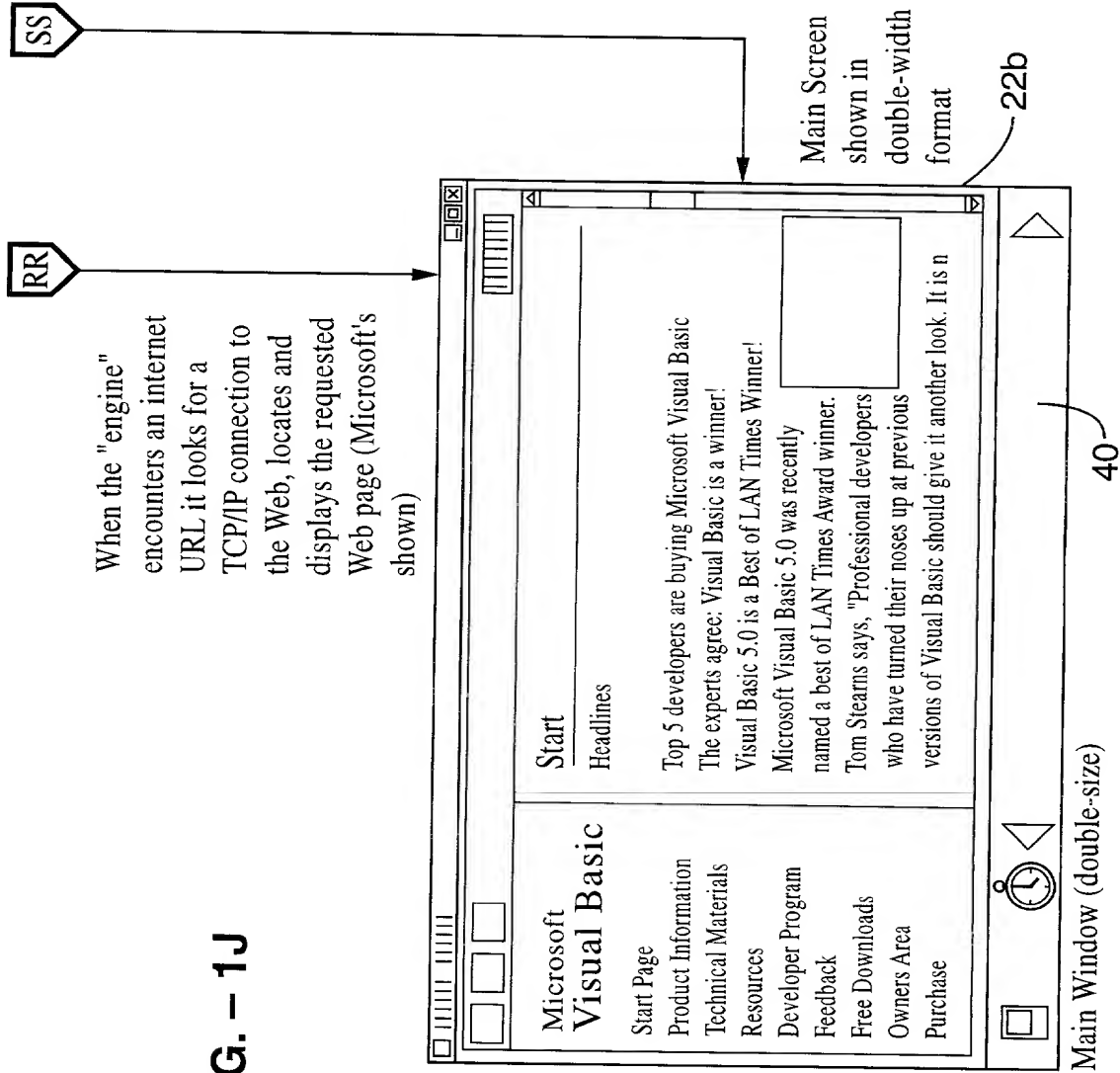


FIG. - 11

FIG. - 1J



Tutorial (click underlined text for more information)

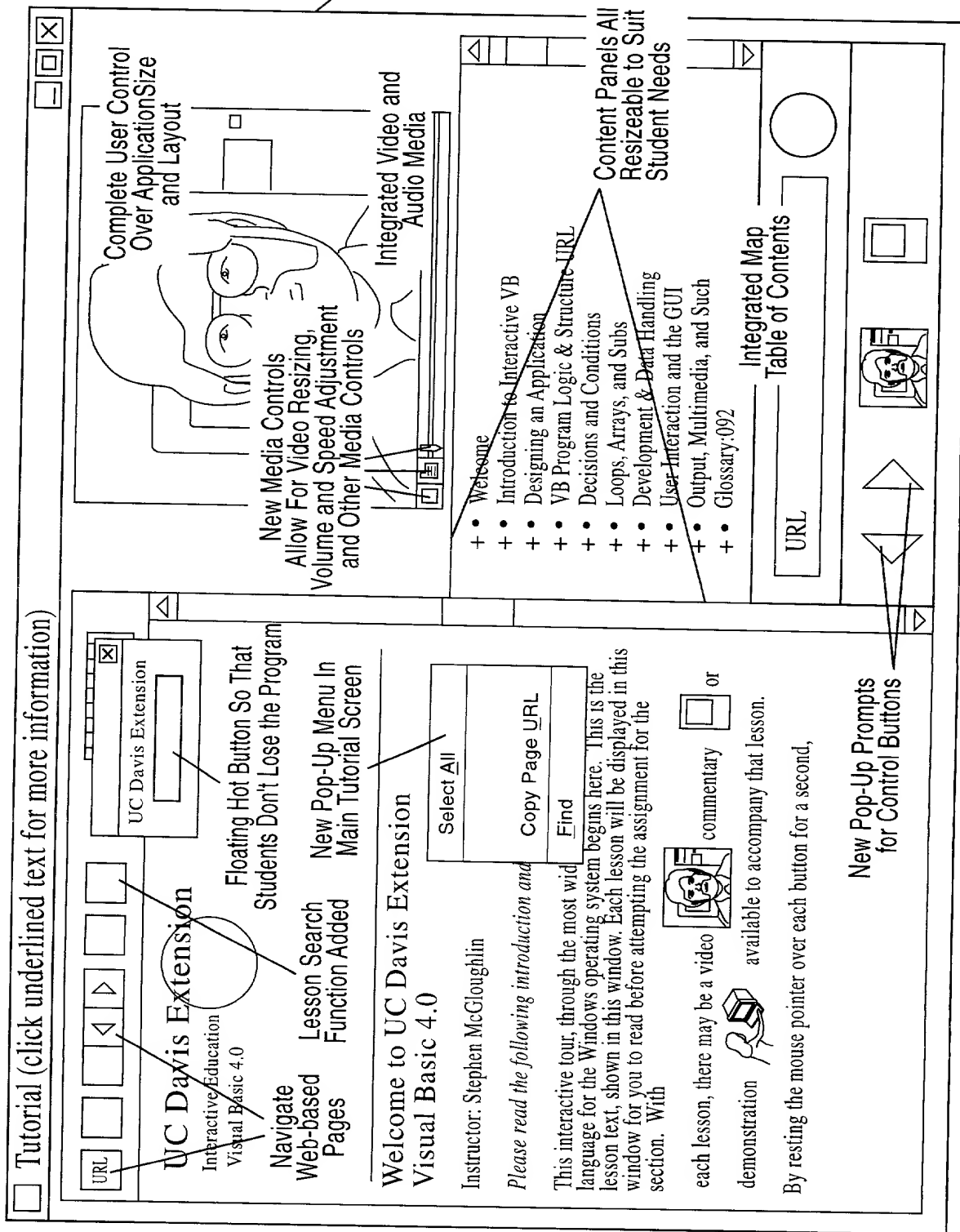


FIG. - 2

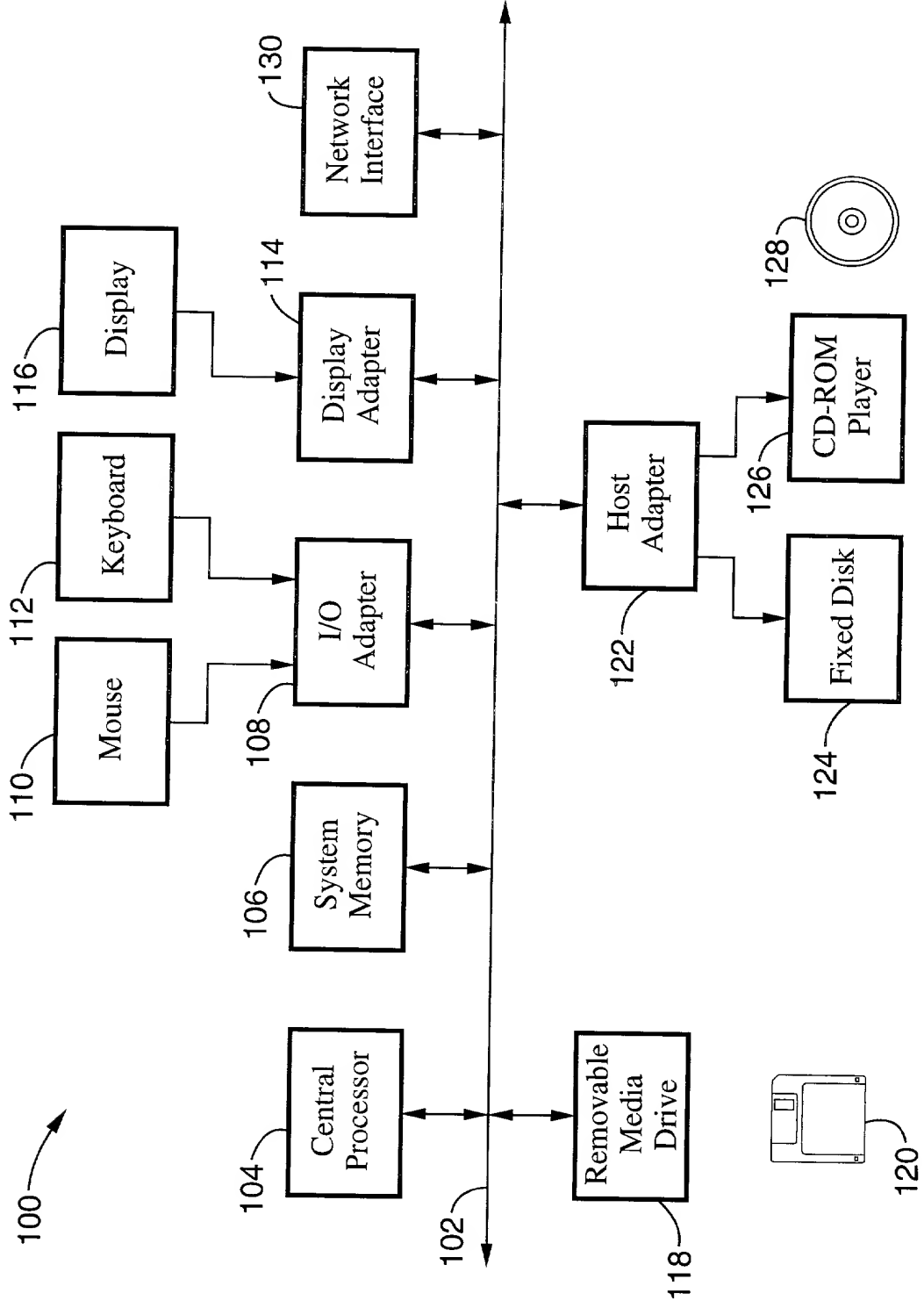


FIG. - 3